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New records of Canadian Aleocharinae (Coleoptera: Staphylinidae)

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Abstract

New records are reported for 53 species of Canadian aleocharines. Eighty-eight new Canadian provincial records (nine from Alberta, 11 from British Columbia, eight from New Brunswick, 23 from Nova Scotia, one from the Northwest Territories, 27 from Ontario, one from Prince Edward Island, and eight from Québec) are provided as well as six new state records from the United States (three from Alaska, two from Washington, and one from Oregon). Of these, six species including *Aleochara (Xenochara) quadrata* Sharp, *Gnathusa eva* Fenyes, *Phymatura blanchardi* (Casey), *Aloconota sulcifrons* (Stephens), *Myrmedonota aidani* Maruyama and Klimaszewski, and *Pella caliginosa* (Casey) are newly recorded in Canada. These new records are examined in the context of what insights they provide in relation to the distribution and biogeography of the Canadian aleocharine fauna.

Keywords

Coleoptera, Staphylinidae, Aleocharinae, rove beetle, new records, biodiversity, biogeography

Introduction

As the most species-rich subfamily (Ashe (2000) estimated 1,385 described North American aleocharines) of the most species-rich family (Marske and Ivie (2003) reported 4,153 species of North American staphylinids), the Aleocharinae are clearly a very important component of the continent's beetle biodiversity. They are found in forests, caves, along seashores, in bogs, in association with ants, along watercourses, and in many open habitats. They are particularly abundant in forested environments

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where many species occur in subcortical environments, in various kinds of leaf litter, and in association with many species of living and decaying fungi. Some aleocharines are frequently found on dung and/or carrion; others are common inhabitants of bird and mammal nests. They are abundant in natural and synanthropic environments, and there are many adventive species introduced in North America (Klimaszewski et al. 2007, Majka and Klimaszewski 2008).

Despite their abundance and their obvious ecological importance in many environments, the Aleocharinae have, until relatively recently, frequently been largely ignored in many faunistic, zoogeographic, ecological, and environmental-impact studies. The reasons for this have been manifold, first and foremost of which has been the confused and poorly understood systematics and taxonomy of the group, coupled with their small size and sometimes secretive habits, and the apparent similarity in appearance of many species. The confused taxonomy, the many unrevised groups, the many undescribed species, and the lack of keys to many groups, have meant that even interested researchers have often been frustrated in their attempts at identification. As a consequence, for a long time relatively little progress was made in North America in understanding the distribution, zoogeography, phenology, and ecology of aleocharines and the role these species play in the large variety of environments that they inhabit.

Fortunately, the past couple of decades have seen an explosion of interest in this group. Many revisionary studies have been published, a large number of new species have been described, and the nomenclature, systematics, and taxonomy of many groups are now much better understood. Important distributional and zoogeographic information has been compiled and there now exists at least first-order information on the bionomics of at least some species. As one illustration of the growth of this information on this group, consider the following: Campbell and Davies (1991) in their checklist of Staphylinidae in Canada and Alaska listed 277 species of aleocharines. Seventeen years later Gouix and Klimaszewski (2007) were able to include 392 species, an increase of 115 species in the recorded fauna. For the 277 species that they treated, Campbell and Davies (1991) provided 585 provincial records whereas Gouix and Klimaszewski (2007) reported 938, an increase of over 60% in the known geographical distribution of the aleocharine fauna of Canada and Alaska. In the present paper, we contribute to this growing knowledge base by reporting new jurisdictional records for 53 of species of Canadian aleocharines.

Methods and conventions

Canadian aleocharines in a number of collections were examined and identified. Codens (following Evenhuis 2007) of collections referred to in this study are:

ACNS Agriculture and Agri-food Canada, Kentville, Nova Scotia, Canada
CASS Collection of Volker Assing, Hanover, Germany

CBU Cape Breton University, Sydney, Nova Scotia, Canada
DAL Dalhousie University, Halifax, Nova Scotia, Canada
DHWC David H. Webster collection, Kentville, Nova Scotia, Canada
GDS Gary D. Selig collection, Bridgewater, Nova Scotia, Canada
JCC Joyce Cook collection, North Augusta, Ontario, Canada
JOC Jeffrey Ogden collection, Truro, Nova Scotia, Canada
LFC Laurentian Forestry Centre (Insectarium R. Martineau), Québec City, Québec, Canada
MZLU Museum of Lund University, Lund, Sweden
NFRC Northern Forestry Centre, Edmonton, Alberta, Canada
NSMC Nova Scotia Museum, Halifax, Nova Scotia, Canada
NSNR Nova Scotia Department of Natural Resources, Shubenacadie, Nova Scotia, Canada
RWC Reginald Webster collection, Charters Settlement, New Brunswick, Canada
SMU Saint Mary's University, Halifax, Nova Scotia, Canada
STFX Saint Francis Xavier University, Antigonish, Nova Scotia, Canada

The number of specimens is indicated in parentheses together with the collection coden. Where the sex of specimens was determined this is indicated by either "m" (male) or "f" (female). Specific details follow. The systematic order follows Gouix and Klimaszewski (2007).

Results

The new national, provincial, and state records of the 53 species of aleocharines treated in this study are summarized in Appendix 1. Their reported distribution in North America is given, the new records reported herein being indicated in boldface. Specific details follow.

Tribe Gymnusini Thompson, 1867

Gymnusa grandiceps Casey, 1915

NEW BRUNSWICK: York Co.: New Maryland, 16.IV.2004, R.P. Webster, mixed forest: leaf litter, (1, RPW).

Gymnusa grandiceps is newly recorded in New Brunswick. No specific bionomic information is available for the species but it is believed to be a hydrophilous species similar to *Gymnusa brevicollis* which is found in swamps, swampy edges of lakes and rivers, sphagnum bogs, and similar habitats (Klimaszewski 1979).

Tribe Aleocharini Fleming, 1821

Aleochara (Xenochara) quadrata Sharp, 1883

CANADA: BRITISH COLUMBIA: near Mabel Lake at Squaw Valley, 5.VIII.1982, R. Baranowski, (1f, MZLU).

Aleochara (Xenochara) quadrata is newly recorded in British Columbia and Canada as a whole. The bionomics of the species are unknown.

Tinotus caviceps Casey, 1894

CANADA: ONTARIO: Carleton Co.: Mer Bleue, 19.IX.1980, R. Baranowski, (1f, MZLU).

Tinotus caviceps Casey is newly recorded in Ontario. The bionomics of the species are unknown.

Tribe Oxypodini Thomson, 1859

Gnathusa eva Fenyes, 1909

CANADA: BRITISH COLUMBIA: Monashee Mountain near Cherryville, 12.VIII.1982, R. Baranowski, 1,400-1,600 m, (1f, LFC; 1, MZLU).

Gnathusa eva is newly recorded in Canada. This species has previously only been recorded from California (Moore and Legner 1975). The bionomics of the species are unknown.

Phloeopora arctica Lohse, 1990

CANADA: ONTARIO: Nipissing Co.: Algonquin Provincial Park near Brent, 19.VIII.1980, R. Baranowski, (2m, MZLU; 1m, LFC).

Phloeopora arctica is newly recorded in Ontario. The species is found under bark (Lohse et al. 1990).

Meronera venustula (Erichson, 1839)

NEW BRUNSWICK: York Co.: New Maryland, 12.IV.2004, R.P. Webster, mixed forest: compost, (1, RPW).

Meronera venustula is newly recorded in New Brunswick. Adults and larvae feed on fungal mycelia and live in wet vegetable litter (Ashe 1985).

Tribe Hypocyphtini Laporte, 1835

Cypha inexpectata Klimaszewski and Godin, 2008

CANADA: ONTARIO: Sudbury Co.: 40 km northeast Gogama, Mattagami River, 25.VIII.1980, R. Baranowski, (2m, MZLU).

Cypha inexpectata is newly recorded in Ontario. The bionomics of the species are unknown.

Tribe Homalotini Heer, 1839

Silusida marginella (Casey, 1894)

CANADA: NOVA SCOTIA: Annapolis Co.: Big Dam Lake, Kejimkujik National Park, 12-22.VIII.2004, 25.VI-5.VII.2004, S. Baker, hemlock forest, pitfall trap, (2, DAL); Channel Lake, Kejimkujik National Park, 12-22.VIII.2004, 25.VI-5.VII.2004, 18.IX.-2.X.2004, H. Love and S. Baker, maple/oak/birch forest, pitfall trap, (12, DAL); Durland Lake, 3.VIII.2003, P. Dollin, hemlock/balsam fir/black spruce forest (120 years), in rotting mushroom, (1, NSMC); **Cape Breton Co.:** Scatarie Island, 8-11. VIII.2005, (I, CBU); **Digby Co.:** Pebbleloggitch Lake, Kejimkujik National Park, 28.VI-7.VII.2004, 13-24.VIII.2004, H. Love, maple/oak/birch forest, pitfall trap, (16, NSMC); **Guysborough Co.:** Middle Lake, 25.VIII.1994, D. Kehler, old deciduous forest, (1, NSMC); **Halifax Co.:** Waverley, 10.VIII.1965, B. Wright, mixed forest, pitfall trap, (1, NSMC); **Queens Co.:** Black Duck Lake, 10.VII.2003, 1.VIII.2003, P. Dollin, white pine/red spruce forest (40-80 years), in rotting mushroom, (2, NSMC); Eight Mile Lake, 11.VIII.2003, P. Dollin, red spruce forest (40-80 years), in decaying white birch log, (1, NSMC); Sixth Lake, 14.VII.2003, 4.VIII.2003, P. Dollin, hemlock forest (120+ years), in rotting mushroom, (3, NSMC); Tobeatic Lake, 13.VII.2003, P. Dollin, red spruce forest (80-120 years), on bracket fungus on white birch, (1, NSMC); Canning Field, Kejimkujik National Park, 14-23.VIII.2004, H. Love, hemlock forest, pitfall trap, (3, DAL); Cobreille Lake, Kejimkujik National Park, 27.VI-6. VII.2004, 13-24.VIII.2004, H. Love, maple/oak/birch forest, pitfall trap, (19, DAL); North Cranberry Lake, Kejimkujik National Park, 13-24.VIII.2004, H. Love, hemlock forest, pitfall trap, (16, DAL); Kejimkujik National Park, 5.IX.2001, 11.IX.2001, 19.IX.2001, 29.IX.2001, B. Wright, hemlock forest, pitfall trap, (4, NSMC); **Richmond Co.:** Irish Cove, 12.VII.1996, P.A. Rankin, (1, CBU). **QUÉBEC:** Hull, Gatineau Park, 16.VIII.1980, R. Baranowski, (1m, MZLU); Hull, Gatineau Park, near Ramsey Lake, 17.VIII.1980, R. Baranowski, (1f, MZLU; 2, MZLU).

Silusida marginella is newly recorded in Nova Scotia and Québec. In Nova Scotia specimens have been collected in various coniferous and deciduous forests. Specimens were collected in decaying gill fungi, on a bracket fungus, and in a decaying white birch (*Betula papyrifera* Marshall) log.

Homalota plana (Gyllenhal, 1810)

CANADA: ONTARIO: Algoma Co.: 10 km east of Wawa, 30.VIII.1980, R. Baranowski, (4m, MZLU; 1m, LFC; 1, LFC); Lake Superior Provincial Park, 9.IX.1980, R. Baranowski, (3m, MZLU; 5 MZLU; 1m LFC; 1, LFC).

This adventive, Palaearctic species is newly recorded in Ontario. In the Old World it is widely distributed across Europe, North Africa, and Asia including eastern and western Siberia (Smetana 2004). In Nova Scotia *H. plana* has been found in sub-cortical environments under the bark of white pine (*Pinus strobus* L.) between December and early May where it is active on sunny days when the sun warms this micro-environment (Klimaszewski et al. 2007a).

Leptusa gatineauensis Klimaszewski & Pelletier, 2004

CANADA: ALBERTA: no locality noted, 30.V.1995, H.E.J. Hammond, (1m, NFRC).

Leptusa gatineauensis is newly recorded in Alberta. Many species of Canadian *Leptusa* occur in fungi, under bark, in scolytine burrows, and in forest litter where they apparently feed on fungal hyphae. Some species overwinter as adults in bark-beetle galleries or under bark. Specimens of *L. gatineauensis* have been found in both coniferous [red spruce (*Picea rubens* Sarg.] and eastern hemlock [*Tsuga canadensis* (L.) Carr.] and deciduous forests and on a specimen of *Piptoporus betulinus* (Fr.) Kar. (Klimaszewski et al. 2004).

Leptusa (Adoxopisalia) opaca Casey, 1894

Although not recorded from New Brunswick in Gouix and Klimaszewski (2007), it is worth drawing attention to the records of this species from that province reported in Klimaszewski et al. (2004).

Silusa alternans Sachse, 1852

CANADA: ONTARIO: Nipissing Co.: Algonquin Provincial Park near Brent, 20.VIII.1980, R. Baranowski, (1m, LFC); Algonquin Provincial Park near Brent, 21.VIII.1980, R. Baranowski, (1f, MZLU).

Silusa alternans is newly recorded in Ontario. North American *Silusa* species are predominantly associated with mushrooms and *S. alternans* has been collected in yellow birch (*Betula alleghaniensis* Britt.) and balsam fir (*Abies balsamea* (L.) Mill) dominated forests from *Clavaria* sp., *Russula* sp., and other fungi (Klimaszewski et al. 2003).

Silusa californica Bernhauer, 1905

CANADA: NOVA SCOTIA: Halifax Co.: Waverley, 10.VIII.1965, B. Wright, mixed forest, pitfall trap, (1, NSMC). **ONTARIO: Algoma Co.:** Wawa, 8.IX.1980, R. Baranowski, (1m, MZLU); Lake Superior Provincial Park, 9.IX.1980, R. Baranowski, (2f, MZLU); Michipicoten River (South of Wawa), 8.IX.1980, R. Baranowski, (1f, LFC); **Nippising Co.:** Algonquin Provincial Park near Brent, 20.VIII.1980, R. Baranowski, (1f, MZLU).

Silusa californica is newly recorded from Ontario and from the Nova Scotia mainland. *Silusa californica* has been collected in mixed boreal forests in forest litter, wet moss, on marten dung, and on mushrooms (Klimaszewski et al. 2003).

Silusa vesperis Casey, 1894

UNITED STATES: OREGON: Benton Co: Mary's Peak, 27.VII.1979, J.M. and B.A. Campbell, 1158 m, (1f, LFC).

Silusa vesperis is newly recorded in Oregon. It is a mountain species found at elevations between 304 and 944 meters. Species of *Silusa* are associated with various species of fungi (Klimaszewski et al. 2003).

Phymatura blanchardi (Casey, 1894)

CANADA: ALBERTA: Lac la Biche, 20-30 km E Touchwood Lk. Rd., 25.VIII-15. IX.1994, J. Hammond, UTM 12 4695 60785, modified window trap, M2-SI-3-I, (1 m, NFRC).

Phymatura blanchardi is newly recorded in Alberta and Canada as a whole. This species is associated with fungi.

Tribe Placusini Mulsant and Rey, 1871

Placusa vaga Casey, 1911

CANADA: NORTHWEST TERRITORIES: 5 km southeast of Inuvik, 68.32881°N, 133.63556°W, 17.VII-3.VIII.2001, M. Gravel et al., mixed spruce-birch forest, ethanol-baited funnel trap, (1m, LFC).

Placusa vaga is newly recorded from the Northwest Territories. Species of *Placusa* live in subcortical habitats in scolytine burrows where they apparently feed on fungal hyphae. In Québec, specimens were collected in balsam fir (*A. balsamea*), white spruce (*Picea glauca* (Moench) Voss), and mixed white spruce-trembling aspen (*Populus tremuloides* Michx.) stands (Klimaszewski et al. 2001).

Tribe Athetini Casey, 1910

Aloconota sulcifrons (Stephens, 1832)

CANADA: QUÉBEC: Hull, Gatineau Park, 16.VIII.1980, R. Baranowski, (1m, MZLU). **UNITED STATES: WASHINGTON: Skagit Co.:** Birdsview, 28.VII.1982, R. Baranowski, (1m, MZLU).

This adventive, Palaearctic species is newly recorded in Québec and Canada as a whole, and in the state of Washington in the United States. In the Old World it is widely distributed in Europe and North Africa, east through Siberia, the Middle East and Central Asia to China, Korea, and India (Smetana 2004). In North America it has frequently been collected in caves and is considered a troglophile (Klimaszewski and Peck 1986).

Atheta annexa Casey, 1910

CANADA: NEW BRUNSWICK: Albert Co.: Crooked Creek, 22.VIII.2003, C.G. Majka, along stream, decaying fungi, (3, CGMC); Mary's Point, 20.IX.2002, D.S. Christie, white spruce forest, gill fungus, (1, CGMC); Mary's Point, 8.IX.2004, C.G. Majka, white spruce forest, on *Russula virescens* (Schaeff.) Fr., (1, CGMC). **NOVA SCOTIA: Annapolis Co.:** Big Dam Lake, Kejimkujik National Park, 27.VI-7.VII.2004, H. Love, hemlock forest, pitfall trap, (1, DAL); Channel Lake, Kejimkujik National Park, 18.IX.-2.X.2004, H. Love, maple/oak/birch forest, pitfall trap, (6, DAL); **Hants Co.:** Woodville Ice Cave, 3.VIII.2007, M. Moseley, deep threshold of cave, leaf litter, (1, NSMC); **Digby Co.:** Pebbleloggitch Lake, Kejimkujik National Park, 13-24.VIII.2004, H. Love, maple/oak/birch forest, pitfall trap, (1, DAL); **Kings Co.:** 10.VIII.2005, D.H. Webster, compost heap, moldy corncobs, (1, DHWC); **Queens Co.:** Canning Field, Kejimkujik National Park, 14-23.VIII.2004, H. Love, hemlock forest, pitfall trap, (1, DAL); Cobreille Lake, Kejimkujik National Park, 27.VI-6.VII.2004, 13-24.VIII.2004, H. Love, maple/oak/birch forest, pitfall trap, (4, DAL); North Cranberry Lake, Kejimkujik National Park, 28.VI-8.VII.2004, H. Love, hemlock forest, pitfall trap, (1, DAL). **ONTARIO: Algoma Co.:** Lake Superior Provincial Park, 11.IX.1980, R. Baranowski, (1m, MZLU; 1m, LFC; 1f, LFC); **Nippising Co.:** Algonquin Provincial Park near Brent, 20.VIII.1980, R. Baranowski, (5m, MZLU; 5f, MZLU; 2m, LFC).

Atheta annexa is newly recorded in New Brunswick, Nova Scotia, and Ontario. It has been collected from organic debris, fungi near cave entrances, raccoon dung, and woodrat (*Neotoma* spp.) nests (Klimaszewski and Peck 1986). In the Maritime Provinces it has been found in decaying fungi, in a cave threshold, and on moldy corncobs.

Atheta brunswickensis Klimaszewski, 2005

CANADA: NOVA SCOTIA: Guysborough Co.: Seloam Lake, 2-15.VI.1997, D.J. Bishop, red spruce forest, flight intercept trap, (1, NSMC); **Halifax Co.:** Point Pleas-

ant Park, 9.IX.2001, C.G. Majka, red spruce forest, on *Amanita gemmata* (Fr.) Gill., (2, CGMC). **ONTARIO: Algoma Co.:** Lake Superior Provincial Park, 10.IX.1980, 2.IX.1980, R. Baranowski, (1m, LFC; 1f, MZLU); **Nippising Co.:** Algonquin Provincial Park near Brent, 20.VIII.1980, R. Baranowski, (1f, MZLU; 1m, LFC); **Sudbury Co.:** Mattagami, 24.VIII.1980, R. Baranowski, (1f, MZLU).

Atheta brunswickensis is newly recorded in Nova Scotia and Ontario. We suspect that this species is continuously distributed in northern Canada and Alaska. It has been found in red spruce (*P. rubens*) forests; two specimens were collected on *Amanita gemmata*.

Atheta novaescotiae Klimaszewski & Majka, 2006

NEW BRUNSWICK: Albert Co.: Mary's Point, 12.V.2007, C.G. Majka, seashore, under dead deer, (4, CGMC).

Atheta novaescotiae is newly recorded in New Brunswick. This species was described by Klimaszewski et al. (2006) from specimens collected in Newfoundland and Nova Scotia in Canada, and the French territory of Saint-Pierre et Miquelon. This species is associated with beach drift and other decomposing environments at the upper end of the littoral zone in sandy and rocky coastline environments (Klimaszewski et al. 2006).

Atheta remulsa Casey, 1910

CANADA: NOVA SCOTIA: Cape Breton Co.: Scatarie Island, Northwest Cove, 10.VIII.2005, K.R. Aikens and A. MacDonald, mixed forest, mushroom on dead wood, (3, CBU); Sydney (CBU campus), 5.X.2003, D.B. McCorquodale, (6, CBU); **Halifax Co.:** Point Pleasant Park, 9.IX.2001, C.G. Majka, red spruce forest, on *Amanita gemmata*, (1, CGMC); Point Pleasant Park, 23.VIII.2002, C.G. Majka, red spruce forest, on gilled fungi, (3, CGMC); Big Indian Lake, 9.VIII.2003, P. Dollin, red spruce forest (80-120 years), in rotting mushroom, (1, NSMC); Waverley, 10.VIII.1965, B. Wright, mixed forest, pitfall trap, (1, NSMC); **Inverness Co.:** Baddeck Forks, 28.X.1996, D.B. McCorquodale, (3, CBU); **Lunenburg Co.:** Bridgewater, 1.VII.1965, B. Wright, (1, NSMC). **ONTARIO: Algoma Co.:** Lake Superior Provincial Park, 3.IX.1980, 6.IX.1980, R. Baranowski, (1m, LFC; 1f, LFC; 2f, MZLU); Michipicoten River (South of Wawa), 5.IX.1980, 8.IX.1980, R. Baranowski, (3m, LFC; 3m, MZLU); **Nippising Co.:** Algonquin Provincial Park near Brent, 20.VIII.1980, 21.VIII.1980, 22.VIII.1980, R. Baranowski, (8m, MZLU; 6f, MZLU; 1m, LFC); **Sudbury Co.:** Mattagami, 27.VIII.1980, R. Baranowski, (1m, MZLU; 1m, LFC; 1f, LFC); 30 km southwest of Foleyet, 30.VIII.1980, R. Baranowski, (3f, LFC; 2f, MZLU; 2 MZLU). **QUÉBEC:** Hull, Gatineau Park, near Ramsey Lake, 17.VIII.1980, R. Baranowski, (2f, MZLU).

Atheta remulsa is newly recorded in Nova Scotia, Ontario, and Québec. In Nova Scotia it has been found in mixed and red spruce (*P. rubens*) forests on decaying and living gilled fungi including *Amanita gemmata*.

Atheta strigosula Casey, 1910

CANADA: BRITISH COLUMBIA: 13 km north of Nelway, 21.VIII.1982, 19.VIII.1982, R. Baranowski, (1m, LFC; 1f, LFC); near Mabel Lake at Squaw Valley, 5.VIII.1982, R. Baranowski, (1m, LFC; 1m, LFC; 1f, MZLU). **ONTARIO: Algoma Co.:** Lake Superior Provincial Park, 2.IX.1980, 6.IX.1980, R. Baranowski, (2m, MZLU; 4f, MZLU); Michipicoten River (South of Wawa), 5.IX.1980, 8.IX.1980, R. Baranowski, (3f, MZLU; 2m, MZLU; 1f, LFC; 2, LFC); **Nippising Co.:** Algonquin Provincial Park near Brent, 19.VIII.1980, 20.VIII.1980, R. Baranowski, (4m, MZLU; 4f, MZLU); **Sudbury Co.:** Mattagami, 27.VIII.1980, R. Baranowski, (1m, MZLU); 30 km southwest of Foleyet, 29.VIII.1980, 30.VIII.1980, R. Baranowski, (2f, LFC; 1f, MZLU). **QUÉBEC:** Hull, Gatineau Park, near Ramsey Lake, 17.VIII.1980, R. Baranowski, (1f, MZLU; 1, MZLU; 1m, LFC). **UNITED STATES: ALASKA:** 8-16 miles east of Willow, 7.VIII.1988, R. Baranowski, (1f, LFC).

Atheta strigosula is newly recorded in British Columbia, Ontario, and Québec in Canada and Alaska in the United States. The bionomics of the species are unknown.

Atheta (Alaobia) ventricosa Bernhauer, 1907

CANADA: ALBERTA: 8 km southeast of Sherwood Park, NE 7 Twp., 53°31'N, 113°19'W, 31.VIII.2003, J. Klimaszewski, aspen forest, (3m, LFC; 1f, LFC; 6 LFC). **NOVA SCOTIA: Halifax Co.:** Moser Lake, 2-15.VI.1987, D.J. Bishop, red spruce forest, flight-intercept trap, (1, NSMC); **Kings Co.:** Blomidon Provincial Park, 12.X.1988, B. Wright, (1, NSMC).

Atheta ventricosa is newly recorded in Nova Scotia and Alberta. It has been found in coniferous forests and in forest litter in mixed forests (Gusarov 2003a).

Atheta (Chaetida) longicornis (Gravenhorst, 1802)

CANADA: BRITISH COLUMBIA: near Mabel Lake at Squaw Valley, 6.VIII.1982, R. Baranowski, (1m, MZLU).

This adventive, Palaearctic species is newly recorded in British Columbia. It is found across Europe, Asia, North Africa, and east to the Orient (Smetana 2004). This species is associated with dung and decaying organic matter. North American specimens have been found on cow dung and pig carrion (Klimaszewski et al. 2007a).

Atheta (Datomicra) dadopora Thomson, 1867

CANADA: ALBERTA: 8 km southeast of Sherwood Park, NE 7 Twp., 53°31'N, 113°19'W, 31.VIII.2003, J. Klimaszewski, aspen forest, (5m, LFC; 7f, LRC; 72 LFC).

ONTARIO: Nippising Co.: Algonquin Provincial Park near Brent, 21.VIII.1980, 20.VIII.1980, R. Baranowski, (1m, LFC); **Sudbury Co.:** 30 km southwest of Foleyet, 29.VIII.1980, R. Baranowski, (1m, MZLU). **UNITED STATES: ALASKA:** Anchorage, 13.VII.2007, K. Renner, (1m, CASS).

Atheta dadopora is newly recorded in Alberta, Ontario, and Alaska. It is widely distributed across Europe east to portions of Asia (Smetana 2004). In Europe it is found in decaying fungi, on cow dung, under fallen leaves, and on other kinds of decomposing matter (Burakowski et al. 1981). Although Gusarov (2003a) listed it as an adventive Palaearctic species, the increasingly wide range of its distribution in North America (Table 1) may indicate that it is Holarctic in distribution. Further evidence is still required, however, to determine its zoogeographic status.

Atheta (Dimetrota) burwelli (Lohse, 1990)

NEW BRUNSWICK: Albert Co.: Mary's Point, 9.VIII.2002, C.G. Majka, white spruce forest, on *Russula virescens*, (1, CGMC).

Atheta burwelli is newly recorded in New Brunswick. It was described from a single specimen in northern Québec in Canada by Lohse et al. (1990) and then reported from the Yukon by Klimaszewski et al. (2008). The specimen from New Brunswick was found on a living *Russula virescens* mushroom growing in a white spruce (*P. glauca*) forest. No other information on its bionomics is known.

Atheta (Dimetrota) crenuliventris Bernhauer, 1907

CANADA: ONTARIO: Algoma Co.: Wawa, 18.IX.1980, R. Baranowski, (2m, LFC; 1f, MZLU; 1m MZLU); **Nippising Co.:** Algonquin Provincial Park near Brent, 20.VIII.1980, R. Baranowski, (1fm MZLU; 1f, LFC).

Atheta crenuliventris is newly recorded in Ontario. The bionomics of the species are unknown.

Atheta (Dimetrota) districta Casey, 1911

CANADA: ALBERTA: 8 km southeast of Sherwood Park, NE 7 Twp., 53°31'N, 113°19'W, 31.VIII.2003, J. Klimaszewski, aspen forest, (1m, LFC; 4f, LFC; 1, LFC). **NOVA SCOTIA: Annapolis Co.:** Big Dam Lake, Kejimkujik National Park, 27.VI-7.VII.2004, H. Love, hemlock forest, pitfall trap, (1, DAL); **Halifax Co.:** 12.VII.2003, 16.VII.2003, 21.VII.2003, 29.VII.2003, C. Cormier, mixed forested, on decaying pig, (4, SMU); **Shelburne Co.:** Bon Portage Island, 27.VIII.2002, D.B. McCorquodale, coastal forest, (2, CBU); **Yarmouth Co.:** Wellington, 25.VI-3.VII.1995, J. and F. Cook, mixed coastal forest, flight-intercept trap, (1, JCC). **ONTARIO: Carleton Co.:**

Mer Bleue, 15.VIII.1980, R. Baranowski, (1, MZLU); **Nippising Co.:** Algonquin Provincial Park near Brent, 21.VIII.1980, 22.VIII.1980, R. Baranowski, (6m, MZLU; 10f, MZLU; 1m, LFC); **Sudbury Co.:** 40 km northeast Gogama, Mattagami River, 27.VIII.1980, R. Baranowski, (1m, MZLU; 1f, LFC); Mattagami, 25.VIII.1980, R. Baranowski, (3f, MZLU; 1m LFC).

Atheta districta is newly recorded in Alberta, Nova Scotia, and Ontario. The specimens from Nova Scotia associated with carrion provide the first information on the bionomics of this species. It has been found in coniferous, mixed, coastal, and eastern hemlock (*T. canadensis*) forests.

Atheta (Dimetrota) hampshirensis Bernhauer, 1909

CANADA: NEW BRUNSWICK: Albert Co.: Mary's Point, 9.VIII.2002, 8.IX.2002, C.G. Majka, white spruce forest, in *Russula virescens*, (4, CGMC); Mary's Point, 12.VIII.2004, C.G. Majka, coastal field, in compost, (7, CGMC). **NOVA SCOTIA: Annapolis Co.:** Big Dam Lake, Kejimkujik National Park, 12-22.VIII.2004, 27.VI-7.VII.2004, H. Love & S. Baker, hemlock forest, pitfall trap, (39, DAL); Channel Lake, Kejimkujik National Park, 12-22.VIII.2004, H. Love, maple/oak/birch forest, pitfall trap, (6, DAL); **Cumberland Co.:** Wentworth, 1.VIII.1965, B. Wright, sugar maple forest, (4, NSMC); **Colchester Co.:** Bible Hill, 31.V.2005, K. Aikens, pasture, (20, CBU); **Digby Co.:** Pebbleloggitch Lake, Kejimkujik National Park, 28.VI-7.VII.2004, 13-24.VIII.2004, H. Love, maple/oak/birch forest, pitfall trap, (8, DAL); South Range, Porters Lake, 27.VII.2003, G.D. Selig, in decaying mushroom, (1, GDS); **Guysborough Co.:** Melopseketch Lake, 14.V-2.VI.1997, D.J. Bishop, young red spruce forest, (1, NSMC); **Halifax Co.:** Long Lake, 25.V.2002, C.G. Majka, meadow in mixed forest, (1, CGMC); Big Indian Lake, 16.VII.2003, P. Dollin, red spruce forest (80-120 yrs), in rotting mushroom, (1, NSMC); Burnside, 12.V.2004, 18.VI.2004, C. Cormier, meadow, on decomposing pig, (2, SMU); **Kings Co.:** Kentville, D.H. Webster, 10.V.2006, on black currant leaf, (1, DHWC); **Lunenburg Co.:** Card Lake, 2-15.VI.1997. D.J. Bishop, old growth red spruce/hemlock forest, flight intercept trap, (1, NSMC); **Queens Co.:** Kejimkujik National Park, 19.IX.2005, 29.IX.2005, B. Wright, deciduous forest, (8, NSMC; Sixth Lake, 4.VIII.2003, P. Dollin, old-growth hemlock forest, in rotting mushroom, (1, NSMC); Kejimkujik National Park, 11.IX.2001, 19.IX.2001, 29.IX.2001, B. Wright, deciduous forest, pitfall trap, (3, NSMC); Canning Field, Kejimkujik National Park, 14-23.VIII.2004, H. Love, hemlock forest, pitfall trap, (5, DAL); Cobreille Lake, Kejimkujik National Park, 27.VI-6.VII.2004, 13-24.VII.2004, H. Love, maple/oak/birch forest, pitfall trap, (84, DAL); North Cranberry Lake, Kejimkujik National Park, 28.VI-8.VII.2004,13-24.VIII.2004, H. Love, hemlock forest, pitfall trap, (12, DAL). **ONTARIO: Nippising Co.:** Algonquin Provincial Park near Brent, 21.VIII.1980, 22.VIII.1980, R. Baranowski, (3m, MZLU; 8f, MZLU; 1f, LFC); **Sudbury Co.:** 40 km northeast Gogama, Mattagami River,

27.VIII.1980, R. Baranowski, (1m, MZLU; 1f, MZLU); Mattagami, 25.VIII.1980, R. Baranowski, (1m, MZLU; 1f, MZLU; 1m, LFC).

Atheta hampshirensis is newly recorded from New Brunswick [it was mentioned as occurring in New Brunswick by Klimaszewski and Winchester (2002) but no specific locality records were reported], Nova Scotia, and Ontario. *Atheta hampshirensis* was originally described under the preoccupied name of *Homalota moesta* Mäklin from Sitka Island, Alaska (Mäklin 1852). In the Maritime Provinces it has been found in various coniferous and deciduous forests and in open habitats, on living and decaying mushrooms, in compost, and on carrion. It is sometimes found together with superficially similar *Strophogastra penicillata* Fenyes and *Atheta dadopora*.

Atheta (Dimetrota) modesta (Melsheimer, 1844)

CANADA: ALBERTA: 8 km southeast of Sherwood Park, NE 7 Twp., 53°31'N, 113°19'W, 31.VIII.2003, J. Klimaszewski, aspen forest, (4m, LFC; 1f, LFC). **NOVA SCOTIA: Annapolis Co.:** Big Dam Lake, Kejimkujik National Park, 12-22.VIII.2004, 27.VI-7.VII.2004, H. Love, hemlock forest, pitfall trap, (54, DAL); Channel Lake, Kejimkujik National Park, 12-22.VIII.2004, 25.VI-5.VII.2004, 18.IX-2.X.2004, H. Love and S. Baker, maple/oak/birch forest, pitfall trap, (13, DAL); **Cape Breton Co.:** East Bay, 9.IX.2003, D.B. McCorquodale, (1, CBU); **Cumberland Co.:** Wallace, 1.VIII.1965, B. Wright, (1, NSMC); Wentworth, VIII.1965, B. Wright, sugar maple forest, pitfall trap, (1, NSMC); **Digby Co.:** Pebbleloggitch Lake, Kejimkujik National Park, 28.VI-7.VII.2004, 13-24.VIII.2004, H. Love, maple/oak/birch forest, pitfall trap, (14, DAL); **Halifax Co.:** Point Pleasant Park, 28.VII.2001, C.G. Majka, coniferous forest, on *Russula brevipes* Pk., (1, CGMC); Point Pleasant Park, 9.IX.2001, C.G. Majka, coniferous forest, on *Amanita gemmata*, (19, CGMC); Point Pleasant Park, 23.VI.2002, C.G. Majka, coniferous forest, on *Fomitopsis pinicola* (Fr.) Kar. (1, CGMC); Point Pleasant Park, 23.VIII.2002, C.G. Majka, coniferous forest, on gilled fungi (2, CGMC); Waverley, 10.VIII.1965, B. Wright, mixed forest, pitfall trap, (3, NSMC); **Inverness Co.:** Bornish Hills, 14-19.VII.1995, G.R. Macpherson, (1, CBU); **Lunenburg Co.:** Bridgewater, 1-16.VII.1965, B. Wright, red oak forest, pitfall trap, (5, NSMC); **Queens Co.:** Canning Field, Kejimkujik National Park, 14-23.VIII.2004, 26.VI-6.VI.2004, H. Love, hemlock forest, pitfall trap, (13, DAL); North Cranberry Lake, Kejimkujik National Park, 28.VI-8.VII.2004, 13-24.VIII.2004, H. Love, hemlock forest, pitfall trap, (4, DAL); Kejimkujik National Park, 28.VI.1994, 24.VIII.1994, 11.IX.2001, 29.IX.2001, 24.VIII-7.IX.1994, 28.VII-9.VIII.1994, B. Wright, deciduous forest, pitfall trap, (13, NSMC).

Atheta modesta is newly recorded in Alberta and Nova Scotia. It has been found in deciduous, coniferous, and mixed forests [e.g., red spruce dominated forests (Klimaszewski et al. 2005b)]. In Nova Scotia specimens were collected from several species of living gilled fungi and polypores.

Atheta (Dimetrota) picipennis (Mannerheim, 1843)

UNITED STATES: WASHINGTON: Jefferson Co.: Olympic Mountain south of Spruce Mountain, 1.IX.1982, R. Baranowski, (1m, MZLU).

Atheta picipennis is newly recorded in the state of Washington. On Vancouver Island they were found between June and early September in Sitka spruce (*Picea sitchensis* (Bong.) Carr.) forests (Klimaszewski and Winchester 2002).

Atheta (Dimetrota) prudhoensis (Lohse, 1990)

CANADA: NEW BRUNSWICK: Albert Co.: Mary's Point, 8.IX.2002, C.G. Majka, white spruce forest, in *Russula virescens*, (1, CGMC); **NOVA SCOTIA: Cape Breton Co.:** 5.X.2003, Sydney (CBU campus), D.B. McCorquodale, (8, CBU); **Victoria Co.:** North River, 9.X.1995, D.B. McCorquodale, (1, CBU). **ONTARIO: Algoma Co.:** Lake Superior Provincial Park, 1.IX.1980, 2.IX.1980, 6.IX.1980, 9.IX.1980, R. Baranowski, (2m, MZLU; 1f, MZLU; 1m, LFC; 1f, LFC); Michipicoten River (South of Wawa), 5.IX.1980, R. Baranowski, (2f, MZLU; 1m, MZLU; 3m, LFC); **Carleton Co.:** Mer Bleue, 19.IX.1980, R. Baranowski, (1m, MZLU); **Nippising Co.:** Algonquin Provincial Park near Brent, 20.VIII.1980, R. Baranowski, (1m, MZLU); **Sudbury Co.:** Mattagami, 25.VIII.1980, 27.VIII.1980, R. Baranowski, (4m, MZLU; 2f, MZLU; 1f, LFC); 30 km southwest of Foleyet, 30.VIII.1980, R. Baranowski, (1m, MZLU); 40 km northeast Gogama, Mattagami River, 27.VIII.1980, R. Baranowski, (4m, MZLU; 3f, MZLU).

Atheta prudhoensis is newly recorded in New Brunswick, Nova Scotia, and Ontario. In Vermont, Gusarov (2003a) found it in forest litter in a birch/maple/oak/hemlock mixed forest. In New Brunswick it was found in a white spruce (*P. glauca*) forest in a *Russula virescens* gill fungus.

Atheta (Dimetrota) pseudomodesta Klimaszewski, 2007

CANADA: NOVA SCOTIA: Cumberland Co.: Wentworth, VIII.1965, B. Wright, summit of ski slope, sugar maple forest, pitfall trap, (1, NSMC). **ONTARIO: Algoma Co.:** Lake Superior Provincial Park, 9.IX.1980, R. Baranowski, (1f, MZLU; 1m, LFC).

Atheta pseudomodesta is newly recorded in Nova Scotia and Ontario. In Québec it was very abundant in yellow birch (*B. alleghaniensis*) forests (Klimaszewski et al. 2007b).

Atheta (Microdota) pennsylvanica Bernhauer, 1907

CANADA: NOVA SCOTIA: Annapolis Co.: Big Dam Lake, Kejimkujik National Park, 12-22.VIII.2004, 27.VI-7.VII.2004, 18.IX-2.X.2004, H. Love, hem-

lock forest, pitfall trap, (13, DAL); Channel Lake, Kejimkujik National Park, 12-22.VIII.2004, 25.VI-5.VII.2004, 18.IX-2.X.2004, H. Love, maple/oak/birch forest, pitfall trap, (9, DAL); **Antigonish Co.:** Pomquet, IV.1996, R.F. Lauff, leaf litter, (1, STFX); **Cape Breton Co.:** Sydney (CBU campus), 15.IX.1990, 4.IX.1996, D.B. McCorquodale, (3, CBU); Scatarie Island, 15.VII.2006, A. MacDonald, in *Boletus* sp. fungus, (1, CBU); **Digby Co.:** Brier Island, Gull Rock Rd., 24.VI.2003, J. Ogden & K. Goodwin, forest, pitfall trap, (1, JOC); **Halifax Co.:** Big St. Margarets Bay, 1-16.VII.1997, D.J. Bishop, old-growth red spruce forest, flight-intercept trap, (1, NSMC); Burnside, 15.VIII.2003, C. Cormier, on decomposing pig, (1, SMU); Waverley, 14.V.1965, 8.VI.1965, B. Wright, red oak forest, window trap, (2, NSMC); **Hants Co.:** Armstrong Lake, 15-30.VI.1997, D.J. Bishop, 75 year old red spruce forest, flight-intercept trap, (1, NSMC); **Digby Co.:** Pebblelogitch Lake, Kejimkujik National Park, 13-24.VIII.2004, H. Love, maple/oak/birch forest, pitfall trap, (21, DAL); **Queens Co.:** Canning Field, Kejimkujik National Park, 14-23.VIII.2004, 26.VI-6.VI.2004, H. Love, hemlock forest, pitfall trap, (34, DAL); North Cranberry Lake, Kejimkujik National Park, 28.VI-8.VII.2004, 13-24.VIII.2004, H. Love, hemlock forest, pitfall trap, (2, DAL); Cobreille Lake, Kejimkujik National Park, 27.VI-6.VII.2004, 13-24.VIII.2004, H. Love, maple/oak/birch forest, pitfall trap, (13, DAL); Kejimkujik National Park, 24.VIII.1994, 7.IX.1994, 2.X.1994, 5.IX.2001, 29.IX.2001, 13-28.VII.1994, 28.VII-11.VIII.1994, 26.IX-19.X.1994, B. Wright, hemlock forest, leaf litter, (8, NSMC); **Victoria Co.:** Still Brook, 17.VIII.2007, L. Stepanovic, fen, pitfall trap, (1, CGMC).

Atheta pennsylvanica is newly recorded in Nova Scotia. In Nova Scotia it has been found in both coniferous and deciduous forests in leaf litter. One specimen was found on a *Boletus* sp. fungus and another on carrion.

Atheta (Microdota) platanoffi Brundin, 1948

CANADA: BRITISH COLUMBIA: Creston, near Kootenay Pass, 1500-1800 m, 18.VIII.1982, R. Baranowski, (1m, LFC); 20 km northeast of Creston, 14.VIII.1982, R. Baranowski, (1f, LFC). **NOVA SCOTIA: Colchester Co.:** Bible Hill, 8.VII.2007, C.W. D'Orsay, pasture, (1, CBU). **ONTARIO: Algoma Co.:** Michipicoten River (South of Wawa), 5.IX.1980, R. Baranowski, (1f, MZLU); Wawa, 8.IX.1980, R. Baranowski, (1f, MZLU); **Nippising Co.:** Algonquin Provincial Park near Brent, 20.VIII.1980, 21.VIII.1980, 22.VIII.1980, R. Baranowski, (3m, MZLU; 7f, MZLU); **Sudbury Co.:** Mattagami, 25.VIII.1980, R. Baranowski, (3m, MZLU; 2f, MZLU; 2f, LFC); 30 km southwest of Foleyet, 29.VIII.1980, R. Baranowski, (1f, MZLU); 40 km northeast Gogama, Mattagami River, 27.VIII.1980, R. Baranowski, (1f, MZLU).

This Holarctic species is newly recorded in British Columbia, Nova Scotia, and Ontario. In Europe it has been recorded in Finland, Sweden, and northern Russia (Smetana 2004). It is found in forest litter.

Atheta (Pseudota) klagesi Bernhauer, 1909

CANADA: ALBERTA: 8 km southeast of Sherwood Park, NE 7 Twp., 53°31'N, 113°19'W, 31.VIII.2003, J. Klimaszewski, aspen forest, (5m, CFL; 1f, LRC); no locality recorded; 23.V.1995, 6.VI.1995, H.E.J. Hammond, (2m, NFRC). **BRITISH COLUMBIA:** Monashee Mountain near Cherryville, 11.VIII.1982, R. Baranowski, 1,400-1,600 m, (1f, LFC; 1, MZLU); 20 km northeast of Creston, 14.VIII.1982, R. Baranowski, (1f, LFC); 23 km northeast of Creston, 16.VIII.1982, R. Baranowski, (1f, MZLU); 25 km west of Creston, 18.VIII.1982, R. Baranowski, (1m, MZLU; 1f, MZLU; 1, MZLU); 13 km north of Nelway, 21.VIII.1982, 19.VIII.1982, R. Baranowski, (1m, LFC); near Mabel Lake at Squaw Valley, 5.VIII.1982, R. Baranowski, (3f, MZLU; 2, MZLU). **NEW BRUNSWICK: Albert Co.:** Mary's Point, 9.VIII.2002, C.G. Majka, white spruce forest, in *Russula virescens*, (6, CGMC); **York Co.:** New Maryland, 15.IV.2004, R.P. Webster, mixed forest, compost, (2, RWC). **NOVA SCOTIA: Halifax Co.:** Abraham's Lake, 14.V-2.VI.1997, 2-15.VI.1997, D.J. Bishop, old-growth red spruce forest, flight-intercept trap, (2, NSMC); Big St. Margaret's Bay, 1-16.VII.1997, 29.VII-13.VIII.1997, D.J. Bishop, old-growth red spruce forest, flight-intercept trap, (2, NSMC); Grassy Lake, 29.VII-13.VIII.1997, D.J. Bishop, red spruce forest, flight-intercept trap, (1, NSMC); Pockwock Lake, 29.VII-13.VIII.1997, D.J. Bishop, mature red spruce forest, flight-intercept trap, (1, NSMC); Sandy Lake, 29.VII-13.VIII.1997, D.J. Bishop, old-growth red spruce forest, flight-intercept trap, (1, NSMC); Ten Mile Lake, 14.V-2.VI.1997, D.J. Bishop, red spruce forest, flight-intercept trap, (1, NSMC); Big Indian Lake, 23.VI.2003, 9.VIII.2003, P. Dollin, red spruce forest (80-120 years), in rotting mushroom, (2, NSMC); **Queens Co.:** Fifth Lake Bay, 4.VIII.2003, old growth hemlock forest, in rotting mushroom, (3, NSMC); Sixth Lake, 14.VII.2003, P. Dollin, old growth hemlock forest, orange bracket fungus, (1, NSMC); Tobeatic Lake, 17.VI.2003, red spruce forest (80-120 years), (1, NSMC). **ONTARIO: Algoma Co.:** Lake Superior Provincial Park, 1.IX.1980, 6.IX.1980, 10.IX.1980, 31.VIII.1980, R. Baranowski, (2m, MZLU; 5f, MZLU); Michipicoten River (South of Wawa), 5.IX.1980, R. Baranowski, (4m, MZLU; 1f, MZLU); **Nippising Co.:** Algonquin Provincial Park near Brent, 20.VIII.1980, R. Baranowski, (2m, MZLU; 4f, MZLU; 1, MZLU; 4m, LFC; 2f, LFC); **Sudbury Co.:** Mattagami, 24.VIII.1980, 26.VIII.1980, 27.VIII.1980, R. Baranowski, (7m, MZLU; 6f, MZLU; 1m, LFC); 30 km southwest of Foleyet, 30.VIII.1980, R. Baranowski, (1m, MZLU). **PRINCE EDWARD ISLAND: Queens Co.:** St. Patricks, 18.VIII.2002, C.G. Majka, along stream, (2, CGMC); St. Patricks, 20.VIII.2002, C.G. Majka, coniferous forest, on *Heterobasidion annosum* (Fr.) Bref., (1, CGMC); St. Patricks, 25.VI.2003, C.G. Majka, coniferous forest, (2, CGMC).

Atheta klagesi is newly recorded in Alberta, British Columbia, New Brunswick, Nova Scotia, Ontario, and Prince Edward Island. In the Maritime Provinces it has frequently been recorded in old-growth and mature red spruce (*P. rubens*) forests in decomposing mushrooms, on bracket fungi, and in compost. In Québec it was recorded in yellow birch (*B. alleghaniensis*) forests by Klimaszewski et al. (2007b).

Atheta (Tetropla) frosti Bernhauer, 1909

CANADA: BRITISH COLUMBIA: Monashee Mountain near Cherryville, 12.VIII. 1982, R. Baranowski, 1,400-1,600 m, (1m, MZLU); 20 km northeast of Creston, 14.VIII.1982, 15.VIII.1982, R. Baranowski, (1m, MZLU; 1f, MZLU; 1f, LFC; 1, LFC); 13 km north of Nelway, 20.VIII.1982, 21.VIII.1982, R. Baranowski, (1f, MZLU; 1m, LFC; 1f, LFC); near Mabel Lake at Squaw Valley, 5.VIII.1982, 6.VIII.1982, R. Baranowski, (3f, MZLU; 2m, MZLU; 2, LFC). **NOVA SCOTIA: Cape Breton Co.:** George's River, 8.X.1995, D.B. McCorquodale, (1, CBU); **Halifax Co.:** Point Pleasant Park, 21.IX.2001, C.G. Majka, coniferous forest, on *Tyromyces* sp. polypore, (1, CGMC); **Lunenburg Co.:** Bridgewater, 1.VII.1965, 1-16.VII.1965, B. Wright, red oak forest, pitfall trap, (9, NSMC); **Queens Co.:** Kejimkujik National Park, 11.IX.2001, B. Wright, deciduous forest, pitfall trap, (1, NSMC). **ONTARIO: Carleton Co.:** Mer Bleue, 16.IX.1980, R. Baranowski, (1f, MZLU); **Nippising Co.:** Algonquin Provincial Park near Brent, 20.VIII.1980, R. Baranowski, (2m, MZLU). **QUÉBEC:** Hull, Gatineau Park, near Ramsey Lake, 17.VIII.1980, R. Baranowski, (2m, MZLU; 1f, MZLU).

Atheta frosti is newly recorded in British Columbia, Nova Scotia, Ontario, and Québec. In Nova Scotia it has been found in both coniferous and deciduous forests and once on a *Tyromyces* sp. polypore.

Clusiota impressicollis (Bernhauer, 1907)

CANADA: ONTARIO: Algoma Co.: 10 km east of Wawa, 8.IX.1980, R. Baranowski, (1f, LFC); **Nipissing Co.:** Algonquin Provincial Park near Brent, 21.VIII.1980, R. Baranowski, (1m, LFC).

Clusiota impressicollis is newly recorded in Ontario. It was originally reported from British Columbia (as *C. claviventris*) by Casey (1910). The bionomics of the species are unknown.

Dinarea angustula (Gyllenhal, 1810)

CANADA: ONTARIO: Renfrew Co.: Pembroke, 14.IX.1980, R. Baranowski, (1m, MZLU).

This adventive, Palaearctic species is newly recorded in Ontario. In the Old World it is widely distributed across Europe, east through western and eastern Siberia (Smetana 2004). It is found in un-forested, arable land; in Canada it has been found in or adjacent to agricultural fields (Klimaszewski et al. 2007a).

Dochmonota rudiventris (Eppelsheim, 1886)

CANADA: QUÉBEC: Hull, Gatineau Park, 16.VIII.1980, R. Baranowski, (1m, MZLU).

This Holarctic or Palaearctic species (its zoogeographic status is still uncertain) is newly recorded in Québec. In the Old World it is found in continental Europe from France north to Fennoscandia, south to Greece, and east across Russia and Siberia to Korea (Smetana 2004). In Europe this species is usually found in floodplain habitats (meadows and leaf litter near water) (Volker Assing, pers. comm.).

Earota dentata (Bernhauer, 1906)

CANADA: NOVA SCOTIA: Colchester Co.: Greenfield, 28.V.1999, J. Ogden, (1, NSNR); **Queens Co.:** Medway River, 13.VII.1993, J. and T. Cook, car net, (1, JCC); **Richmond Co.:** Irish Cove, 1-4.VI.2004, C.W. D'Orsay, (1, CBU). **ONTARIO: Nippising Co.:** Algonquin Provincial Park near Brent, 20.VIII.1980, 20.VIII.1980, R. Baranowski, (1f, MZLU; 1f, LFC); **Sudbury Co.:** 40 km northeast Gogama, Mattagami River, 27.VIII.1980, R. Baranowski, (1m, MZLU; 1f, MZLU); Mattagami, 25.VIII.1980, 28.VIII.1980, 29.VIII.1980,R. Baranowski, (2m, MZLU; 4f, MZLU; 1m, LFC; 2, LFC).

Earota dentata is newly recorded from Nova Scotia and Ontario. Although not recorded from New Brunswick in Gouix and Klimaszewski (2007), it is worth drawing attention to the records of this species from that province reported in Klimaszewski et al. (2004). It is found in leaf litter, moss, river debris, and pocket gopher (*Geomys* sp.) burrows (Gusarov 2002).

Hydrosmecta pseudodiosica Lohse, 1990

CANADA: ONTARIO: Sudbury Co.: 40 km northeast Gogama, Mattagami River, 25.VIII.1980, R. Baranowski, (1m, MZLU; 1f, MZLU; 1, LFC).

Hydrosmecta pseudodiosica is newly recorded in Ontario. Lohse et al. (1990) reported that it occurs along the edges of streams and running water.

Liogluta aloconotoides Lohse, 1990

CANADA: NOVA SCOTIA: Queens Co.: Medway River, 13.VII.1993, J. and T. Cook, car net, (1, JCC). **ONTARIO: Algoma Co.:** Lake Superior Provincial Park, 2.IX.1980, R. Baranowski, (2m, LFC); Michipicoten River (South of Wawa), 5.IX.1980, R. Baranowski, (1f, MZLU); **Sudbury Co.:** 40 km northeast Gogama, Mattagami River, 26.VIII.1980, R. Baranowski, (1f, LFC). **QUEBEC**: Hull, near Kidder Lake, 17.VIII.1980, R. Baranowski, (1f, MZLU).

Liogluta aloconotoides is newly recorded in Nova Scotia, Ontario, and Québec. The bionomics of the species are unknown.

Mocyta breviuscula (Mäklin, 1852)

CANADA: NOVA SCOTIA: Guysborough Co.: Malay Lake, 2-15.VI.1997, D.J. Bishop, red spruce forest, flight-intercept trap, (1, NSMC); **Halifax Co.:** Sable Island, Old Main Station, 24.IV.1976, B. Wright, sand dunes, under boards, (7, NSMC); Moser Lake, 2-15.VI.1997, D.J. Bishop, red spruce forest, flight-intercept trap, (1, NSMC).

Mocyta breviuscula is newly recorded from Nova Scotia. Particularly noteworthy are the specimens collected on Sable Island, a 45 km long sand bar located near the edge of the continental shelf, 160 km from the nearest point of land. In Nova Scotia it has been found in both red spruce (*P. rubens*) forests and on isolated insular sand bars. On the Pacific coast it has also been found in coastal environments in Sitka, Alaska and on the Queen Charlotte Islands, British Columbia (Gusarov 2003a). We suspect that this species is continuously distributed in northern Canada.

Mocyta fungi (Gravenhorst, 1806)

CANADA: ALBERTA: 8 km southeast of Sherwood Park, NE 7 Twp., 53°31'N, 113°19'W, 31.VIII.2003, J. Klimaszewski, aspen forest, (1f, LFC; 10, LFC). **BRITISH COLUMBIA:** Wynndel, Kootenay Lake, 14.VIII.1982, R. Baranowski, (1f, MZLU); near Cherryville at Monashee Summit, 1100-1200 m, 8.VIII.1982, R. Baranowski, (1f, MZLU); near Mabel Lake at Squaw Valley, 4.VIII.1982, 5.VIII.1982, R. Baranowski, (2f, MZLU); 15 km east Denver, Zincton Summit, 13.VIII.1982, R. Baranowski, (1f, LFC).

This adventive, Palaearctic species is newly recorded from Alberta and British Columbia. It is widely distributed across Europe, North Africa, and Asia (Smetana 2004). It is found in fungi, litter (mainly deciduous), rotten wood, in mosses, and in decaying plants (Burakowski et al. 1981).

Philhygra botanicarum Muona, 1983

CANADA: BRITISH COLUMBIA: New Denver, 13.VIII.1982, R. Baranowski, (2m, MZLU; 2f, MZLU; 1m, LFC; 1 LFC). 20 km northeast of Creston, 15.VIII.1982, R. Baranowski, (1m, LFC); 23 km northeast of Creston, 16.VIII.1982, R. Baranowski, (1f, LFC); Monashee Summit near Cherryville, 8.VIII.1982, R. Baranowski, 1,100-1,200 m, (1m, MZLU; 1f, MZLU; 1, MZLU; 1f, LFC; 1, LFC). **ONTARIO: Algoma Co.:** Lake Superior Provincial Park, 4.IX.1980, R. Baranowski, (1f, MZLU); **Nippising Co.:** Algonquin Provincial Park near Brent, 20.VIII.1980, R. Baranowski, (1f, MZLU).

Philhygra botanicarum is newly recorded from British Columbia and Ontario. It was described by Muona (1983) from Finland, then reported in North America

from Newfoundland by Muona (1984). Although Muona (1984) included this species amongst Palaearctic aleocharines occurring in North America, we consider it a Holarctic species. The bionomics of the species are unknown.

Philhygra clemens (Casey, 1910)

CANADA: BRITISH COLUMBIA: 13 km north of Nelway, 21.VIII.1982, R. Baranowski, (1f, MZLU); between Lumby and Mabel Lake, 4.VIII.1982, R. Baranowski, (1f, MZLU). **NOVA SCOTIA: Cumberland Co.:** Oxford, 6.VIII.1988, 7.VIII.1988, 12.VIII.1988, E. Georgeson, ultra-violet light trap, (3, NSMC). **ONTARIO: Algoma Co.:** Michipicoten River (South of Wawa), 5.IX.1980, R. Baranowski, (2m, MZLU; 2f, MZLU; 1f, LFC); **Carleton Co.:** Mer Bleue, 20.IX.1980, R. Baranowski, (1m, MZLU); **Nippising Co.:** Algonquin Provincial Park near Brent, 20.VIII.1980, R. Baranowski, (1f, MZLU); **Renfrew Co.:** Pembroke, 14.IX.1980, 14.IX.1980, R. Baranowski, (1f, MZLU; 1 LFC); **Sudbury Co.:** Mattagami, 28.VIII.1980, R. Baranowski, (1m, MZLU).

Philhygra clemens is newly recorded from British Columbia, Nova Scotia, and Ontario. In New Brunswick it was found in red spruce (*P. rubens)* forests, whereas in Québec it was found in yellow birch (*B. alleghaniensis*) forests (Klimaszewski et al. 2007b).

Philhygra "humivaga" [Gusarov, 2001-2003, undescribed]

CANADA: BRITISH COLUMBIA: near Mabel Lake at Squaw Valley, 4.VIII.1982, 6.VIII.1982, R. Baranowski, (2m, MZLU).

Philhygra "humivaga" is newly recorded from British Columbia. This undescribed species is listed in Gusarov (2001-2003) as occurring in Alaska. No information about the bionomics of this species is available.

Philhygra laevicollis (Mäklin, 1852)

CANADA: NOVA SCOTIA: Lunenburg Co.: Bridgewater, 12.V.1965, B. Wright, (1, NSMC).

Philhygra laevicollis is newly recorded in Nova Scotia. In New Brunswick it was found in red spruce forests whereas in British Columbia it was found in Sitka spruce (*P. sitchensis*) forests.

Philhygra rostrifera Lohse, 1990

UNITED STATES: ALASKA: Eureka Summit, Highway 1, 5.VIII.1988, R. Baranowski, 1,000 m, under stone, roadside open ground, (1m, MZLU).

Philhygra rostrifera is newly recorded from Alaska. Except for the information above, nothing further is known about the bionomics of the species.

Seeversiella globicollis (Bernhauer, 1907)

CANADA: NOVA SCOTIA: Victoria Co.: Cape Breton Highlands, 10.VII.2005, J. Ogden, flight-intercept trap, (1, JOC).

Seeversiella globicollis is newly recorded from Nova Scotia. It is found in leaf litter, often near water. In the southern parts of its range it is restricted to mountainous forest, mostly above 2,000 m (Gusarov 2003b).

Strophogastra penicillata Feynes, 1921

CANADA: NOVA SCOTIA: Digby Co.: Pebbleloggitch Lake, Kejimkujik National Park, 13-24.VIII.2004, H. Love, maple/oak/birch forest, pitfall trap, (1, DAL); **Queens Co.:** Kejimkujik National Park, 24.VIII.1994, B. Wright, deciduous forest, pitfall trap, (1, NSMC). **ONTARIO: Nippising Co.:** Algonquin Provincial Park near Brent, 20.VIII.1980, 20.VIII.1980, R. Baranowski, (2f, MZLU; 1f, LFC); **Sudbury Co.:** Mattagami, 25.VIII.1980, R. Baranowski, (1m, LFC). **QUÉBEC**: Hull, Gatineau Park, near Ramsey Lake, 17.VIII.1980, R. Baranowski, (2m, MZLU; 2f, MZLU); Roddick Lake, 20.VIII-12.IX.1982, L. Huggert, pan trap, (1, LFC).

Strophogastra penicillata is newly recorded from Nova Scotia, Ontario, and Québec. In Nova Scotia it was found in deciduous forests.

Tribe Lomechusini Fleming, 1821

Xenodusa reflexa (Walker, 1866)

NOVA SCOTIA: Kings Co.: Berwick, 1.VI.1941, H.T. Stultz, associated with ants under stone, (1, ACNS).

Xenodusa reflexa is newly recorded in Nova Scotia. Adults and larvae are myrmecophilus and live in ant nests. Known hosts of *X. reflexa* include *Camponotus noveboracensis* (Fitch), *Camponotus laevigatus* (Smith), *Camponotus herculeanus modoc* Wheeler, and *Formica subpolita* Mayer (Hoebeke 1976).

Myrmedonota aidani Maruyama and Klimaszewski, 2008

CANADA: ONTARIO: Carleton Co.: Mer Bleue, 16.IX.1980, R. Baranowski, (1m, LFC).

Myrmedonota aidani is newly recorded in Ontario and in Canada as a whole. It was described by Maruyama et al. (2008) from Ohio in the United States. Most species of Lomechusini are considered myrmecophilous and *M. aidani* is no exception. Specimens in the United States were collected in association with 14 species of ants of the genera *Lasius, Brachymyrmex, Prenolepis, Formica, Myrmica, Stenamma, Solenopsis, Aphaenogaster,* and *Ponera* (Maruyama et al. 2008).

Pella caliginosa (Casey, 1993)

CANADA: ALBERTA: Tp. 112, Rge. 20, W. 5 Mer., 14.VII.1981, B.F. and J.L. Carr, lot 5, (1f, LFC).

Pella caliginosa is newly recorded in Alberta and in Canada as a whole. North American species of the genus *Pella* have been associated with ant species of the genus *Lasius* (subgenus *Dendrolasius*) and occasionally with species in the genera *Crematogaster, Formica, Liometopum,* and *Tapinoma* (Klimaszewski et al. 2005a).

Discussion

As a result of the present investigations new jurisdictional records are reported for 53 species of aleocharines. Eighty-eight new Canadian provincial records (nine from Alberta, 11 from British Columbia, eight from New Brunswick, one from the Northwest Territories, 23 from Nova Scotia, 27 from Ontario, one from Prince Edward Island, and eight from Québec) are provided as well as six new state records for the United States (three from Alaska, two from Washington, and one from Oregon). Of these, six species including *Aleochara (Xenochara) quadrata, Gnathusa eva*, *Phymatura blanchardi, Aloconota sulcifrons, Myrmedonota aidani*, and *Pella caliginosa* are newly recorded in Canada. The ninety-one new records (88 from Canada and 3 from Alaska) increase the number of provincial and state records for Canada and Alaska to 1029, an almost 10% increase in distribution of the known fauna. Five species, including *Homalota plana, Aloconota sulcifrons, Atheta (Chaetida) longicornis, Dinaraea angustula,* and *Mocyta fungi* are adventive Palaearctic species; four including *Atheta (Datomicra) dadopora, Atheta (Microdota) platanoffi, Dochmonota rudiventris,* and *Philhygra botanicarum* are Holarctic (or probably Holarctic) species; and the remaining 44 species are native, Nearctic ones.

In many cases these new records dramatically alter our understanding of the range of the species involved. Examples include:

a) Range extensions of *Aleochara quadrata* and *Gnathusa eva,* previously known from the Pacific coast of the United States, show them to occur further northward than previously known;

b) *Phloeopora arctica, Cypha inexpectata, Clusiota impressicollis,* and *Hydrosmecta pseudodiosica,* previously known from the western Canadian arctic, are newly recorded from Ontario in central Canada;
c) *Mocyta breviuscula* previously known from western North America, is newly recorded from Atlantic Canada;
d) *Leptusa gatineauensis, Atheta strigosula, Atheta klagesi, Atheta frosti, Atheta modesta,* and *Philhygra botanicarum,* all previously known from eastern North America, are newly recorded in the western portions of the continent;
e) *Atheta burwelli*, previously known from the northeastern and northwestern subarctic, is newly recorded in Atlantic Canada;
f) *Liogluta alconotoides*, previously known from the northeastern and northwestern subarctic, is newly recorded from central and Atlantic Canada;
g) *Philhygra rostrifera*, previously known from the northeastern subarctic, is newly recorded from Alaska in the northwest;
h) *Phymatura blanchardi* and *Pella caliginosa*, previously known from the central United States are newly recorded from Alberta in western Canada;
i) *Myrmedonota aidani,* previously known only from Ohio in the United States, is newly recorded in central Canada;
j) *Meronera venustula, Atheta annexa, Atheta burwelli, Atheta hampshirensis, Atheta prudhoensis*, *Atheta klagesi*, *Atheta frosti*, *Earota dentata*, *Seeversiella globicollis,* and *Xenodusa reflexa* are all newly recorded in Atlantic Canada;
k) The distributions of the adventive species *Aloconota sulcifrons, Atheta longicornis, Dinarea angustula, Homalota plana,* and *Mocyta fungi* are shown to be more extensive than previously known. In particular *A. sulcifrons* is newly recorded in Canada, and both this species and *A. longicornis* are newly recorded in western North America.

In other instances the new records fill in what would appear to be expected distributional gaps which have resulted from insufficient previous collecting effort (i.e., *Gymnusa grandiceps, Tinotus caviceps, Silusida marginella, Silusa alternans, Silusa californica, Silusa vesperis, Atheta brunswickensis, Atheta crenuliventris, Atheta districta, Atheta remulsa, Atheta ventricosa, Atheta picipennis, Atheta pseudomodesta, Atheta pennsylvanica, Atheta platanoffi, Dochmonota rudiventris, Philhygra clemens, Philhygra laevicollis,* and *Strophogastra penicillata*.)

Thus, these new records contribute to an understanding of the biogeography of the Aleocharinae in North America, and hence of the post-glacial historical development and dispersal of the group on the continent.

Even with this new information it is clear that much still remains to be done to establish the composition and distribution of the Canadian aleocharine fauna. With such a knowledge it will be increasingly possible to develop an understanding of the role that these abundant beetles play in the many environments that they inhabit.

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Appendix 1. North American distribution of Aleocharines reported in this study

Species	Distribution	Source
Gymnusini Thompson		
Gymnusa grandiceps Casey	MB, **NB**, NS, ON, QC / IL, MA, MD, MI, NY	K (1979)
Aleocharini Fleming		
Aleochara (Xenochara) quadrata Sharp §	**BC /** CA, NV / MX	K (1984), N-H (2002)
Tinotus caviceps Casey	**ON**, QC / AZ, ID, IN, IA, NJ, NV, NY, PA	M&L (1975), K (2002)
Oxypodini Thomson		
Gnathusa eva Fenyes §	**BC** / CA	M&L (1975)
Phloeopora arctica Lohse	**ON**, NW, YT	L (1990)
Meronera venustula (Erichson)	**NB**, ON, QC / FL, ID, RI, TX, UT	M&L (1975), C&D (1991)
Hypocyphtyni Laporte		
Cypha inexpectata Klimaszewski & Godin	**ON**, YT	K&G (2008)
Tribe Homalotini		
Silusida marginella (Casey	NB, **NS**, ON, **QC** / NY, PA	M&L (1975), K (2005), G&K (2007)
Homalota plana (Gyllenhal) †	AB, NB, NS, **ON** / AK, AZ, CA, ID, IN, FL, NY, TX, WA	K (2004), K (2007a), M&L (1975), G&K (2007)
Leptusa gatineauensis Klimaszewski & Pelletier	**AB**, NS, ON, QC	K (2004)
Leptusa opaca Casey	NB, NS, ON, PE, QC / NC	K (2004)
Silusa alternans Sachse	NB, NS, **ON**, QC / GA, NH, NY	K (2003)
Silusa californica Bernhauer	AB, BC, NB, NS, **ON**, QC / AK, CA, MN	K (2003)
Silusa vesperis Casey	BC / CA, **OR**, WA	K (2003)
Phymatura blanchardi (Casey) §	**AB** / IN, IO, MO, NY	M&L (1975)
Placusini Mulsant and Rey		
Placusa vaga Casey	BC, **NW**, QC, YT / CA	K (2001), K (2008)
Athetini Casey		
Aloconota sulcifrons (Stephens) † §	**QC** / AL, IL, IN, KY, MO, NH, NY, TN, VA, **WA**, WV	K&P (1986), G (2003a)

Species	Distribution	Source
Atheta annexa Casey	**NB**, **NS**, **ON**, QC / AB, FL, GA, IO, IL, IN, KS, KT, LA, MO, MS, ON, NC, NY, TN, VA, WI, WV	K&P (1986), G (2003a)
Atheta brunswickensis Klimaszewski	NB, **NS**, **ON, YT**	K (2005), K (2008)
Atheta novaescotiae Klimaszewski & Majka	**NB**, NF, NS / / PM	K (2006)
Atheta remulsa Casey	AB, BC, NB, **NS**, **ON**, **QC**, YT	K (2005b), G&K (2007)
Atheta strigosula Casey	**BC**, NB, **ON**, **QC**, YT / **AK**, NY	K (2005b), K (2008)
Atheta (Alaobia) ventricosa Bernhauer	BC, **AB**, NB, **NS**, ON, YT / AK, DC, NY, NC, PA, VT	G (2003a), K (2008)
Atheta (Chaetida) longicornis (Gravenhorst) †	**BC**, NS, QC / MN	K (2007a)
Atheta (Datomicra) dadopora Thomson *	**AB**, NF, NB, NS, **ON**, PE, YT / **AK**, RI, PA, NY	G (2003a), K (2005b), K (2008), M&K (2008a), M&K (2008b)
Atheta (Dimetrota) burwelli (Lohse)	**NB**, QC, YT	L (1990), K (2008)
Atheta (Dimetrota) crenuliventris Bernhauer	NB, **ON**, QC / ME	M&L (1975), L (1990)
Atheta (Dimetrota) districta Casey	**AB**, BC, NB, **NS**, **ON**	K (2005)
Atheta (Dimetrota) hampshirensis Bernhauer	BC, **NB**, **NS**, **ON** / AK, CA, NH, NY, NC, OR, PA, RI, WA	K&W (2002), G (2003a)
Atheta (Dimetrota) modesta (Melsheimer)	**AB**, NB, **NS**, ON, QC / CT, DC, MI, NY, PA, RI, VT, WV	G (2003a), K (2005b)
Atheta (Dimetrota) picipennis (Mannerheim)	BC, NW, YT / AK, CA, **WA**	K&W (2002), G (2003a), G&K (2007)
Atheta (Dimetrota) prudhoensis (Lohse)	**NB**, **NS**, **ON**, YT / AK, NY, VT	L (1990), G (2003a)
Atheta (Dimetrota) pseudomodesta Klimaszewski	**NS**, **ON**, QC	K (2007b)
Atheta (Microdota) pennsylvanica Bernhauer	NB, **NS**, ON, QC / MA, MN, NY, PA, VT	G (2003a), K (2005b)
Atheta (Microdota) platanoffi Brundin *	AB, **BC**, NB, **NS**, **ON** / AK	K (2005b)

Species	Distribution	Source
Atheta (Pseudota) klagesi Bernhauer	**AB**, **BC**, **NB**, **NS**, **ON**, **PE**, QC, YT / IA, ME, MN, NJ, NY, PA	G (2003a), G&K (2007), K (2008)
Atheta (Tetropla) frosti Bernhauer,	**BC**, NB, **NS**, **ON**, **QC** / MA, NH, NY, NC, PA, RI, VT	G (2003a), K (2005)
Clusiota impressicollis (Bernhauer)	BC, **ON** / WA	G (2001-2003)
Dinarea angustula (Gyllenhal) †	BC, NS, **ON**, PE, QC / NY	M&L (1975), K (2007a)
Dochmonota rudiventris (Eppelsheim) *	NF, NW, **QC**, YT / MA, ID	G (2003a)
Earota dentata (Bernhauer)	AB, BC, MB, NB, **NS**, **ON**, QC / AK, AL, AZ, CA, CO, DC, IA, ID, IL, IN, KA, MA, MD, ME, MT, NC, NH, NJ, NM, NV, OH, OR, PA, VA, WA	G (2002)
Hydrosmecta pseudodiosica Lohse	**ON**, YT	L (1990)
Liogluta alconotoides Lohse	LB, **NS**, **ON**, **QC**, YT	L (1990), K (2008)
Mocyta breviuscula (Mäklin)	BC, **NS**, YT / AK, CA, NV	G (2003a), K (2008)
Mocyta fungi (Gravenhorst) †	**AB**, **BC**, NB, NF, NS, ON, PE, QC, YT / MA, ME, MN, NY, OR, RI	G (2003a), G&K (2007), M&K (2008a), K (2008)
Philhygra botanicarum Muona *	**BC**, NF, NS, **ON**, YT	M (1984), M&K (2008a), K (2008)
Philhygra clemens (Casey)	**BC**, NB, **NS**, **ON**, QC / IA, NY, PA, RI, WI	G (2001-2003), K (2005b), K (2007b)
Philhygra "humivaga" [Gusarov]	**BC** / AK	G (2001-2003)
Philhygra laevicollis (Mäklin)	BC, NB, **NS**, MB / AK, WA	M&L (1975), K&W (2002), K (2005b), G&K (2007)
Philhygra rostrifera Lohse	LB / **AK**	L (1990)
Seeversiella globicollis (Bernhauer)	AB, BC, NS, ON, QC / AZ, CO, ID, MN, MT, NH, NM, SD, WI / GT, HN, MX	G (2003b)
Strophogastra penicillata Feynes	AB, MB, NB, **NS**, **ON**, **QC**	M&L (1975), K (2005b), G&K (2007)

Species	Distribution	Source
Lomechusini Fleming		
Xenodusa reflexa (Walker)	AB, BC, MB, **NS**, ON, QC, SK / AZ, CA, CO, CT, IA, IL, MA, MD, MI, MN, MT, ND, NE, NH, NM, NV, NY, OR, RI, SC, UT, VT, WA, WI, WY	H (1976)
Myrmedonota aidani Maruyama & Klimaszewski §	**ON** / OH	M (2008)
Pella caliginosa (Casey) §	**AB** / IN, NY	M&L (1975)

Notes: Entries in **boldface** indicate new jurisdictional records reported in the present paper. †, adventive Palaearctic species; *, Holarctic species; §, indicates species newly recorded in Canada. The two-letter state and provincial codens follow postal code abbreviations, except that we employ LB (Labrador) and NF (Newfoundland) to distinguish between the two portions of the province of Newfoundland and Labrador (NL). Canadian provinces are followed by American states, which are then followed by any other jurisdictions. Abbreviations of source citations refer to the appropriate publications cited in the "References" section of the present paper. "Klimaszewski et al." has in all instances been abbreviated to "K".